

REMARKS

The Official Action mailed September 3, 2008, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time. Accordingly, the Applicant respectfully submits that this response is being timely filed.

The Applicant notes with appreciation the consideration of the Information Disclosure Statement filed on June 23, 2006.

Claims 1-48 were pending in the present application prior to the above amendment. Claim 3 have been canceled without prejudice or disclaimer; and claims 1, 6, 11, 13, 14, 22, 23, 31, 32, 40 and 41 have been amended to better recite the features of the present invention. Accordingly, claims 1, 2 and 4-48 are now pending in the present application, of which claims 1, 13, 22, 31 and 40 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

In response to a request in paragraph 1 of the Official Action, the Applicant will correct any errors in the specification of which the Applicant becomes aware.

Paragraph 3 of the Official Action rejects claims 1 and 3-5 as anticipated by JP 2000-340503 to Hiroyuki. The Applicant respectfully submits that an anticipation rejection cannot be maintained against the independent claims of the present application, as amended.

As stated in MPEP § 2131, to establish an anticipation rejection, each and every element as set forth in the claim must be described either expressly or inherently in a single prior art reference. Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Independent claim 1 has been amended to recite that a first direction is a forward direction, and that a second direction is a backward direction, which is supported in the present specification, for example, by page 5, lines 13-17, and Figure 5. For the

reasons provided below, the Applicant respectfully submits that Hiroyuki does not teach the above-referenced features of the present invention, either explicitly or inherently.

The Official Action asserts that "Hiroyuki teaches the first direction and the second direction is reverse direction ... [0009]" (page 2, Paper No. 20080828). The Applicant respectfully disagrees and traverses the assertions in the Official Action.

In paragraph [0009], Hiroyuki addresses a first irradiation direction of the first energy light and a second irradiation direction of the second energy light. The first irradiation direction of Hiroyuki does not correspond with "the first direction" of the present claims, and the second irradiation direction of Hiroyuki does not correspond with "the second direction" of the present claims, because, in Hiroyuki, the first irradiation direction and the second irradiation direction differ from each other by 90 degrees.

On the other hand, as shown in Figures 5-7 of the present application and the related embodiment described in the specification (beginning at page 14, line 18), a direction along A-A' supports the claimed "forward direction" and a direction along B-B' supports the claimed "back direction." In other words, the forward and back directions of the present invention are distinguished from the first irradiation direction and the second irradiation direction of Hiroyuki, which differ from each other by 90 degrees.

Therefore, the Applicant respectfully submits that Hiroyuki does not teach that a first direction is a forward direction, and that a second direction is a backward direction, either explicitly or inherently.

Since Hiroyuki does not teach all the elements of the independent claims, either explicitly or inherently, an anticipation rejection cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 102 are in order and respectfully requested.

Paragraph 6 of the Official Action rejects claim 2 as obvious based on the combination of Hiroyuki and JP 2003-257885 to Koichiro. Paragraph 7 of the Official Action rejects claims 6-12 as obvious based on the combination of Hiroyuki and

Koichiro. Paragraph 8 of the Official Action rejects claims 13-48 as obvious based on the combination of Koichiro and Hiroyuki. The Applicant respectfully submits that a *prima facie* case of obviousness cannot be maintained against the independent claims of the present application, as amended.

As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some reason, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some reason to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Independent claim 6 has been amended to recite "wherein the third laser beam is scanned in a forward direction in a first period, wherein the third laser beam is scanned in a backward direction in a second period, and wherein the beam intensity of the second laser beam in the first period is larger than that in the second period." Independent claims 13, 22, 31 and 40 have been amended to recite "wherein the irradiation surface is scanned with the laser beam in a forward direction in a first period, wherein the irradiation surface is scanned with the laser beam in a backward direction in a second period, and wherein beam intensity is varied between the first period and the second period by the means for varying beam intensity."

Please incorporate the arguments above with respect to the deficiencies in Hiroyuki. Koichiro does not cure the deficiencies in Hiroyuki. The Official Action concedes that Hiroyuki does not teach the features of claims 2 and 6-11 and relies on Koichiro to allegedly teach these features (pages 4-5, Paper No. 20080828). Also, the Official Action relies on Koichiro to allegedly teach an apparatus that alters laser beams using a convex lens; various types of lasers; and the use of non linear optics (page 6, Id.). However, Hiroyuki and Koichiro, either alone or in combination, do not teach or suggest the following features or that Hiroyuki should be modified to include any of the following features: (1) that a first direction is a forward direction, and that a second direction is a backward direction; (2) "wherein the third laser beam is scanned in a forward direction in a first period, wherein the third laser beam is scanned in a backward direction in a second period, and wherein the beam intensity of the second laser beam in the first period is larger than that in the second period;" or (3) "wherein the irradiation surface is scanned with the laser beam in a forward direction in a first period, wherein the irradiation surface is scanned with the laser beam in a backward direction in a second period, and wherein beam intensity is varied between the first period and the second period by the means for varying beam intensity." Since Hiroyuki and Koichiro do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

  
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